2001-04 ELECTRICAL

Fuses & Circuit Breakers - 163 Chassis

IDENTIFICATION

NOTE: The following table identifies applicable models covered in this article.

MODEL IDENTIFICATION - 463 CHASSIS

Model (Year)	Chassis Number	Engine Number
ML430 (2001)	163.172	113.942
ML320 (2001-03)	163.154	112.942
ML55 AMG (2001-03)	163.174	113.981
ML500 (2002-04)	163.175	113.965
ML350 (2003-04)	163.157	112.970

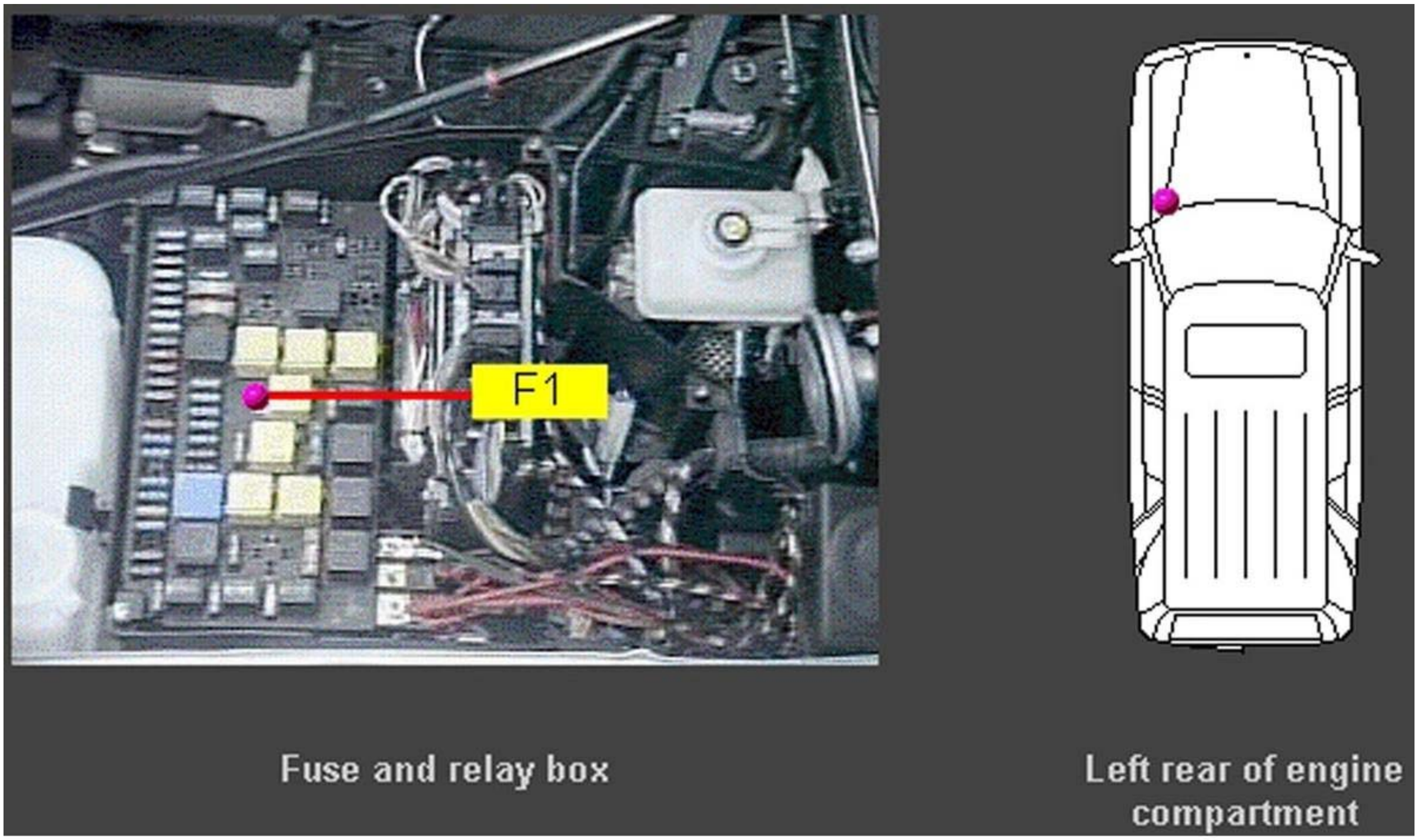
FUSE & RELAY IDENTIFICATION

NOTE: The vehicle's electrical systems are protected by an assortment of fuses and relays. Protective fuses should only be replaced by fuses of correct rating.

Vehicles have 2 fuse boxes located in the following areas:

1. Left rear of engine compartment - fuse and relay box F1 (fuses f1-f48 and relays). See **Fig. 1** .
2. Right front footwell - fuse and module box F2 (fuses f1-f26 and relays). See **Fig. 2** .

To identify fuse assignments, see **FUSE ASSIGNMENTS** . To identify relay assignments, see **RELAY ASSIGNMENTS** .



G00315199

Fig. 1: Locating Fuse & Relay Box F1
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

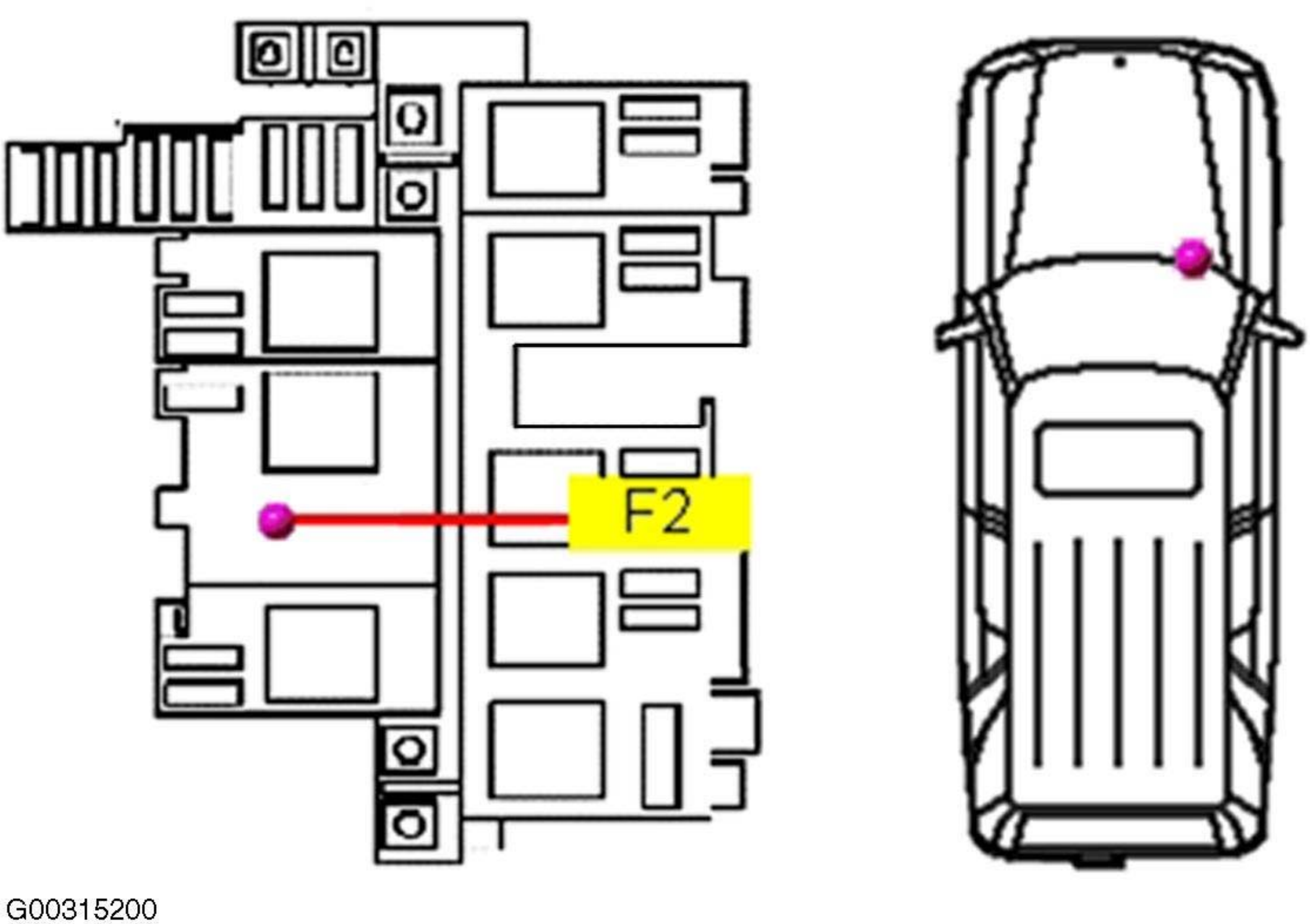
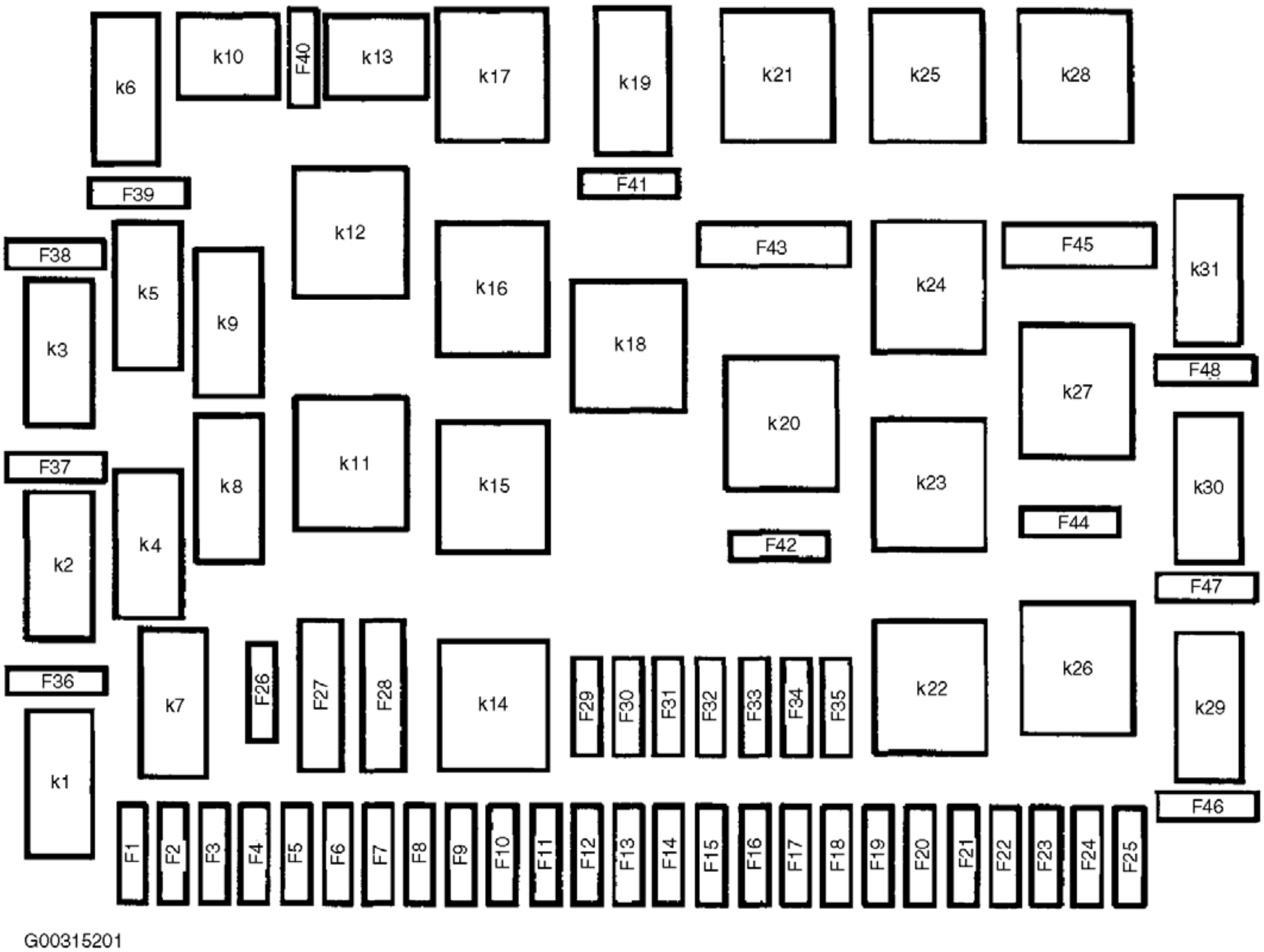


Fig. 2: Locating Fuse & Module Box F2
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

FUSE ASSIGNMENTS

Fuse & Relay Box F1 Fuse Assignments (Up-To-08/31/01)

For fuse locations, see **Fig. 3** . For fuse assignments, see **Fig. 4** - **Fig. 9** .



<u>Fig. 3: Locating Fuses & Relays In Fuse & Relay Box F1</u>
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
1	15		5,0 mm^2 red	Interior socket (X58/1)		15
2	L		0,5 mm^2 green 1,0 mm^2 green	Instrument cluster (A1): • Left front indicator lamp (A1e1) Left front lamp unit (E1): • Left turn signal lamp (E1e5) Left left taillamp (E3): • Left turn signal lamp (E3e1) Left auxiliary turn signal lamp (E22/1) Interior connector sleeve, circuit L (Z53/4) • Trailer hitch connector (X52)		7,5
3	56a	2,0 mm^2 bg	1,0 mm^2 white	Right front lamp unit (E2): • Right high beam (E2e1)		15
4	30		2,0 mm^2 white	Supply of sliding/tilting roof (SHD) circuit 30: • Sliding/tilting roof motor (SHD) (M12)		30
5	56a	2,0 mm^2 bg	1,0 mm^2 white 0,5 mm^2 white	Left front lamp unit (E1): • Left high beam (E1e1) Instrument cluster (A1): • High beam indicator lamp (A1e3)		7,5
6	15		0,8 mm^2 green	Rear-end door wiper motor (M6/4)		7,5
7	30 53a	3,0 mm^2 grey	2,0 mm^2 white 1,0 mm^2 white	Combination switch (S4): • Hazard flasher switch (S6/1s1) • Windshield washer system switch (S4s4) • Wipe switch (S4s5) Wiper motor (M6/1) Relay k17: Front wiper interval relay		15
8	30		1,0 mm^2 red	Transfer case control unit (N78)		25

G00315202

Fig. 4: Fuse Assignments Fuse & Relay Box F1 (1 Of 6)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
9	58	1,0 mm ^{2} grey	0,5 mm ^{2} grey 0,8 mm ^{2} grey	Instrument cluster (A1) License plate illumination: • Left rear-end door license plate lamp (E19/3V right rear-end door license plate lamp (E19/4) • License plate lamp, left spare wheel carrier (E19/5)/ license plate lamp, right spare wheel carrier (E19/6) Cockpit connector sleeve, circuit 58d (Z50/1): • Left vent window switch (S21/13)/ right vent window switch (S21/14) (light emitting diodes) • Left front SIH switch (S51/1)/ right front SIH switch (S51/2) (light emitting diodes) • Heater/AC switch (S98) (light emitting diodes) • 2-way switch combination (S97/6) (light emitting diodes) • ESP OFF switch (S76/6) (light emitting diodes) • Outside mirror switch, folding in and out (S50/1) (light emitting diode) • Electric headlamp range adjustment selector (S1/1) (light emitting diode) • Rear window wipe/wash switch (S78) (light emitting diode) • Tilting/sliding roof switch (S13/2) (light emitting diode) • Backup lamp switch (S16/2) • Illumination (R3e1) • Center console switch group (S21)		7,5
10	15R	3,0 mm ^{2} grey	0,5 mm ^{2} pink	Radio (A2) Roof connector sleeve, circuit 15R (Z54/1): • Left sun visor with illuminated mirror (E14/1) • Right sun visor with illuminated mirror (E14/2) • Trip computer control unit (N41) • Automatic dimming inside rearview mirror (H7) Front cigar lighter (with ashtray illumination)R3 • Heating element (R3r1) Glove compartment lamp (E13/1) Instrument cluster (A1): • Airbag indicator and warning light (A1e15)		10
11	15		1,5 mm ^{2} red / blue	Hot-film mass air flow sensor (B2/5) Camshaft position sensor (L5/1) Fuel injection valves (Y62) In the case of M111: • HFM control module (N3/4)		10

G00315203

Fig. 5: Fuse Assignments Fuse & Relay Box F1 (2 Of 6)

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
12	58L	1,0 mm^2 blue	0,8 mm^2 blue 1,0 mm^2 blue	Interior connector sleeve, circuit 58L (Z53/6): • Trailer hitch connector (X52) • Left taillamp (E3): -Left taillamp and parking lamp (E3e2) Left front lamp unit (E1): • Left standing and parking lamp (E1e3) • Left side-marker lamp (E1e6)		7,5
13	30		2,0 mm^2 red 0.5 mm^2 rt 0.5 mm^2 rt 0.5 mm^2 rt	Roof connector sleeve, circuit 30 (Z54/2): • Front dome lamp (with shut-off delay and front reading lamp) (E15/2) • Rear interior lamp (E15/3) • Dome lamp in left rear (E15/8) • Dome lamp in right rear (E15/9) • Trip computer control unit (N41) Instrument cluster (A1): • Seat belt warning lamp (A1E9) Steering angle sensor (N49) Datalink connector (X11/4)		10
14	15			with diesel: Injection timing device Exhaust gas recirculation valve		10
15	54		1,0 mm^2 og	Interior connector sleeve, circuit 54 (Z52/6): Left left taillamp (E3): • Left stop lamp (E3e4) Right taillamp (E4): • Right stop lamp (E4e4) • Center-high mounted stop lamp (E21) • Center high-mounted stop lamp, spare wheel carrier (E35) • Trailer hitch connector (X52)		10
16	15		0,5 mm^2 grey 1,0 mm^2 grey	Diagnostic connector (X11/4) Reversing lamp switch (S16/2) Cockpit connector sleeve, circuit 15 (Z50/2): • Air conditioning control unit (N19) • Heater/AC switch (S98): -Blower switch (S98s1) -Thermostat (S98p1) -Recirculated air switch indicator lamp (S98h1) -Illumination (S98e1) -Switch illumination (S98e2) -Recirculated air switch (S98s2) -Air conditioning On indicator lamp (S98h2) -Switch illumination (S98e2) -Air conditioning On switch (S98s3) • Recirculated air flap actuator motor (M39) • Air conditioning control unit (N19)		15
17	30		2,0 mm^2 red	Cargo area connector box (X58/4)		15
18	30		2,0 mm^2 red	Trailer hitch connector (X52)		25

G00315204

Fig. 6: Fuse Assignments Fuse & Relay Box F1 (3 Of 6)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
19	30		2,5 mm^2 rt/gn 0,5 mm^2 blue 1,0 mm^2 blue 1,0 mm^2 blue	M111: HFM control module (N3/4) Adjustable camshaft timing solenoid (Y49) Activated charcoal filter shutoff valve (Y58) M112/113: Terminal 87 M2e connector sleeve (Z7/36) • Intake manifold switchover valve (Y22/5) • EGR switchover valve (Y27) • Air pump vacuum valve (Y32) • O2-Left oxygen sensor, upstream of catalytic converter. (G3/3) • O2-Right oxygen sensor, upstream of catalytic converter. (G3/4) Purge control valve (AKF) (Y58/1) O2-Left oxygen sensor, downstream of catalytic converter. (G3/5) O2-Right oxygen sensor, downstream of catalytic converter. (G3/6) M113: Cylinder switch-off valve 1Y80 Cylinder switch-off valve 1Y80		15
20	15		0,5 mm^2 pink	Left electrically adjustable and heated outside mirror (M21/1), right electrically adjustable and heated outside mirror (M21/2) Mirror heater		15
21	30		1,0 mm^2 red	with Sound system: Sound amplifier (A2/13) Radio (A2)		25
22	15		2,0 mm^2 blue 0,5 mm^2 blue 0,5 mm^2 blue 1,0 mm^2 blue 0,5 mm^2 blue	Interior connector sleeve, circuit 15 (Z51/5) • ETC [EGS] control module (N15/3) • Transmission range recognition switch (S16/10) • Blocking solenoid, backup/park pawl (Y66/1) • Transfer case control unit (N78) • Traction systems control unit (N47) With ESP: • Steering angle sensor (N49) Instrument cluster (A1) (F1k3) Fuel pump relay Cruise control pushbutton switch (S40) with M111: HFM-SFI control unit (N3/4) with M112/113: Motor electronics control unit (N3/10)		
23				Spare		
24	58R	0,8 mm^2 blue	0,8 mm^2 green 1,0 mm^2 blue 1,0 mm^2 green 1,0 mm^2 green	Interior connector sleeve, circuit 58R (Z52/4): • Trailer hitch connector (X52) Right front lamp unit (E2): • Right standing and parking lamp (E2e3) Right taillamp (E4): • Right taillamp and parking lamp (E4e2) Right side-marker lamp (E2e6)		7,5

Fig. 7: Fuse Assignments Fuse & Relay Box F1 (4 Of 6)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
25	R		1,0 mm^2 pink 0,5 mm^2 pink	Right front lamp unit (E2): • Right turn signal lamp (E2e5) Right taillamp (E4) • Right turn signal lamp (E4e1) Right auxiliary turn signal lamp (E22/2) Traction system control unit (N47) Interior connector sleeve, circuit R (Z53/5): •Trailer hitch connector (X52) Instrument cluster (A1): •Right turn signal indicator lamp (A1e2)		7,5
26	15		4.0 mm^2 pink/red 2.5 mm^2 black/ yellow 4.0 mm^2 black/ yellow	Connector sleeve, circuit 15 fused (Z3/29): • Ignition coils M111 (T1) • Ignition coils M112 (T1) • Ignition coils M113 (T1)		15
27	30		1,0 mm^2 red	Traction systems control unit (N47)		40
28	15R/30		3,0 mm^2 white	Heated seats interior connector sleeve (Z53/ 8): Supply of left/right heated seats: • Heated seats relay, stage 1 (K59) • Heated seats relay, stage 2 (K59/1) • Left front seat heated cushion (R13/1)/ right front seat heated cushion (R13/3) • Left front backrest heated cushion (R13/ 2) right front backrest heated cushion (R13/4)		20
29	15R/30		2,0 mm^2 og 1,0 mm^2 og	Center console switch group (S21): • Right front window switch (S21s2) -Right front power window motor (M10/4) • Left rear window switch (S21s3) Switch combination, power windows, rear center console (S21/15): • Left rear window switch (S21/15s1) -Power window motor: rear left (M10/5) Relay 16:Right front power window (F1k16)		30
30	15R/30		2,0 mm^2 og 1,0 mm^2 grey	Center console switch group (S21): • Left front window switch (S21s1) • Right rear window switch (S21s4) Switch combination, power windows, rear center console (S21/15): • Right front window switch (S21/15s2) Relay 18:Left front power window (F1k18)		30
31	30		0,5 mm^2 blue 0,8 mm^2 blue	Center console switch group (S21): • Switch, electrical outside mirror adjustment (S50) Cockpit connector sleeve, vent window (Z50/ 13): Rear vent window: • Left vent window switch (S21/13) • Right vent window switch (S21/14) Sliding/tilting roof switch (S13/2)		15
32	15R/30		2,0 mm^2 og	Right front seat adjustment switch (S23) Right front seat adjustment motor group (M26) • Fore/aft motor (M26/m1) • Rear up/down motor (M26/m2) • Front up/down motor (M26/m3) • Backrest fore/aft motor (M26/m5)		30
33	15R/30		2,0 mm^2 og	Left front seat adjustment switch (S22) Seat adjustment motor group: left front (M25): • Fore/aft motor (M25/m1)		30

Fig. 8: Fuse Assignments Fuse & Relay Box F1 (5 Of 6)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
34	56L		1,0 mm ^{2} pink 0,5 mm ^{2} pink	Left front lamp unit (E1): Left low beam (E1e2) (S1/1Electric headlamp range adjustment selector) Left headlamp range adjustment motors (E1m1), right headlamp range adjustment motors (E1m2)		7,5
35	56R		1,0 mm ^{2} pink	Right front lamp unit (E2): Right low beam (E2e2)		7,5
36	30		3,0 mm ^{2} pink	Rear window heater		25
37	30		1,0 mm ^{2} og	Fanfare horns: • Two-tone signaling system (H1) • Two-tone signaling system, horn 2 (H1/1)		20
38	30		1,0 mm ^{2} green	Fuel pump with fuel gauge sensor (M3/3)		20
39				Spare		
40	30		4.0 mm^2 rt	Vacuum pump (M 612.963)		25
41	30		1,0 mm ^{2} white	Circulating pump relay (F1k19) Right engine compartment connector sleeve, pump (Z57/2): • Coolant circulation pump (M13) • Module box blower motor (M2/2) with diesel: Heater booster Stationary heater		25
42	30		0,8 mm ^{2} white 1,0 mm ^{2} white	Central locking: • Left front door central locking motor (M14/6) • Right front door central locking motor (M14/5) Connector sleeve, interior central locking (Z53/1): • Rear-end door central locking motor (M14/7) • Left rear door CL [ZV] motor (M14/8) • Right rear door CL [ZV] motor (M14/9) • Fuel filler flap CL [ZV] motor (M14/10)		20
43	30		5,0 mm ^{2} white	Heater blower relay (F1k21) Blower motor (M2)		30
44	30		2,0 mm ^{2} green	Engine fan relay, stage 1 (F1k26) Engine fan relay, stage 1 (F1k26) Left engine compartment connector sleeve, fan (Z56/2) • Left additional fan (M4m1) • Right additional fan (M4m2)		30
45	30		2,5 mm^2 red /white	Electrical air pump (M33)		40
46	58NS		0,8 mm ^{2} bg 1,0 mm ^{2} bg	Cockpit connector sleeve, rear fog lamp (Z50/10): • 2-way switch combination (S96/7) (rear fog lamp diode) Left taillamp (E3), right taillamp (E4) • Left rear fog lamp (E3e5), right rear fog lamp (E4e5) Trailer hitch connector (X52)		7,5
47	58N		1,0 mm ^{2} grey 1,0 mm ^{2} grey	Left engine compartment connector sleeve, additional headlamp (Z56/4) Left front lamp unit (E1): • Left fog lamp (E1e4) • Left additional headlamp high beam (E1e7), right additional headlamp high beam (E2e7) Right front headlamp unit (E2)		15

Fig. 9: Fuse Assignments Fuse & Relay Box F1 (6 Of 6)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse & Relay Box F1 Fuse Assignments (As-Of-09/01/01)

For fuse locations, see **Fig. 3** . For fuse assignments, see **Fig. 10** - **Fig. 14** .

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
1				Not assigned		
2	L		0,5 mm^2 green 1,0 mm^2 green	Instrument cluster (A1): • Left turn signal indicator lamp (A1e1) Left front lamp unit (E1): • Left turn signal lamp (E1e5) Left taillamp (E3): • Left turn signal lamp (E3e1) Left auxiliary turn signal lamp (E22/1) Interior connector sleeve, circuit L (Z53/4) • Trailer hitch connector (X52)		7,5
3				NOT ASSIGNED		
4	30		2,0 mm^2 white	Supply of sliding/tilting roof (SHD) circuit 30: • Sliding/tilting roof motor (SHD) (M12)		20
5				Not assigned		
6	15		3,0 mm^2 white	Seat heater		20
7	30 53a	3,0 mm^2 grey	2,0 mm^2 white 1,0 mm^2 white	Combination switch (S4): • Hazard flasher switch (S6/1s1) • Windshield washer system switch (S4s4) • Wipe switch (S4s5) Wiper motor (M6/1) Windshield washer fluid pump (M5/1) Relay k17: Front wiper interval relay		30
8	30		1,0 mm^2 red	Transfer case control unit (N78)/ E- Call control unit (A35/8)		25
9	58	1,0 mm^2 grey	0,5 mm^2 grey 0,8 mm^2 grey	Instrument cluster (A1) License plate illumination: • Left rear-end door license plate lamp (E19/3), right rear-end door license plate lamp (E19/4), • License plate lamp, left spare wheel carrier (E19/5), license plate lamp, right spare wheel carrier (E19/6) Cockpit connector sleeve, circuit 58d (Z50/1): • Left vent window switch (S21/13), right vent window switch (S21/14) (light emitting diodes) • Left front SIH switch (S51/1), right front SIH switch (S51/2) (light emitting diodes) • 2-way switch combination (S97/6) (light emitting diodes) • ESP OFF switch (S76/6) (light emitting diodes) • Outside mirror switch, folding in and out (S50/1) (light emitting diode) • Electric headlamp range adjustment selector (S1/1) (light emitting diode) • Rear window wipe/wash switch (S78) (light emitting diode) • Tilting/sliding roof switch (S13/2) (light emitting diode) • Backup lamp switch (S16/2) • Illumination (R3e1) • Center console switch group (S21)		7,5

G00315208

Fig. 10: Fuse Assignments Fuse & Relay Box F1 (1 Of 5)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
10	15R	3,0 mm^2 grey	0,5 mm^2 pink	Radio (A2) Roof connector sleeve, circuit 15R (Z54/1) • Left sun visor with illuminated mirror (E14/1) • Right sun visor with illuminated mirror (E14/2) • Automatic dimming inside rearview mirror (H7) Front cigar lighter with ashtray illumination (R3) • Heating element (R3r1) Glove compartment lamp (E13/1) Instrument cluster (A1): • Airbag indicator and warning light (A1e15)		10
11	15		1,5 mm^2 red / blue	Hot-film mass air flow sensor (B2/5) Camshaft position sensor (L5) Fuel injection valves (Y62) In the case of M111: • HFM control module (N3/4)		15
12	58L	1,0 mm^2 blue	0,8 mm^2 blue 1,0 mm^2 blue	Interior connector sleeve, circuit 58L (Z53/6) • Trailer hitch connector (X52) • Left taillamp (E3): -Left taillamp and parking lamp (E3e2) Left front lamp unit (E1): • Left standing and parking lamp (E1e3) • Left side-marker lamp (E1e6)		7,5
13	30		2,0 mm^2 red 0.5 mm^2 rt 0.5 mm^2 rt 0.5 mm^2 rt	Roof connector sleeve, circuit 30 (Z54/2) • Front dome lamp (with shut-off delay and front reading lamp) (E15/2) • Rear interior lamp (E15/3) • Dome lamp in left rear (E15/8) • Dome lamp in right rear (E15/9) • Left front footwell lamps (E17/16) • Right front footwell lamps (E17/15) • Trip computer control unit (TRIP) (N41) Instrument cluster (A1): Steering angle sensor (N49) Datalink connector (X11/4)		10
14	15			Engine control unit (diesel) Injection timing device Exhaust gas recirculation valve		25
15	54		1,0 mm^2 og	Interior connector sleeve, circuit 54 (Z52/6) Left left taillamp (E3) • Left stop lamp (E3e4) Right taillamp (E4): • Right stop lamp (E4e4) • Center high-mounted stop lamp (E21) • Center high-mounted stop lamp, spare wheel carrier (E35) • Stop lamp switch • Trailer hitch connector (X52)		10

Fig. 11: Fuse Assignments Fuse & Relay Box F1 (2 Of 5)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
16	15		0,5 mm^2 grey 1,0 mm^2 grey	Diagnostic connector (X11/4) Reversing lamp switch (S16/2) Cockpit connector sleeve, circuit 15 (Z50/2) • Air conditioning control unit (N19) • Heater/AC switch (S98) -Blower switch (S98s1) -Thermostat (S98p1) -Illumination (S98e1) -Illumination (S98e2) -Recirculated air switch (S98s2) -Air conditioning On switch (S98s3) • Recirculated air flap actuator motor (M39) Instrument cluster (A1)		15
17	30		2,0 mm^2 red	Cargo area connector box (X58/4)		20
18	30		2,0 mm^2 red	Trailer hitch connector (X52)		25
19	30		2.5 mm^2 red/green 0.5 mm^2 blue	M111: HFM control module (N3/4) Adjustable camshaft timing solenoid (Y49) Activated charcoal filter shutoff valve (Y58) M112/113: Terminal 87 M2e connector sleeve (Z7/36) • EGR switchover valve (Y27) • Air pump vacuum valve (Y32) • O2-Left oxygen sensor, upstream of catalytic converter. (G3/3) • O2-Right oxygen sensor, upstream of catalytic converter. (G3/4) Purge control valve (Y58/1) O2-Left oxygen sensor, downstream of catalytic converter. (G3/5) O2-Right oxygen sensor, downstream of catalytic converter. (G3/6)		15
20				Not assigned		
21	30		1,0 mm^2 red	Radio (A2) Cellular telephone Voice control system (VCS)		15
22	15		2,0 mm^2 blue 0,5 mm^2 blue 0,5 mm^2 blue 1,0 mm^2 blue 0,5 mm^2 blue	Interior connector sleeve, circuit 15 (Z51/5) • ETC [EGS] control module (N15/3) • Transmission range recognition switch (S16/10) • Blocking solenoid, backup/park pawl (Y66/1) • Transfer case control unit (N78) • Traction systems control unit (N47) With ESP: • Steering angle sensor (N49) Instrument cluster (A1) Cruise control pushbutton switch (S40) with M111: HFM-SFI control unit (N3/4) with M112/113: Motor electronics control unit (N3/10) Suction fan control unit (N65/2) on models 163.174/175 Rain sensor (B38) Trip computer control unit (TRIP) (N41)		15

Fig. 12: Fuse Assignments Fuse & Relay Box F1 (3 Of 5)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
23	15			Headlamp range adjustment control module (N71)		15
24	58R	0,8 mm ^{2} blue	0,8 mm ^{2} green 1,0 mm ^{2} blue 1,0 mm ^{2} green 1,0 mm ^{2} green	Interior connector sleeve, circuit 58R (Z52/4) • Trailer hitch connector (X52) Right front headlamp unit (E2) • Right standing and parking lamp (E2e3) Right taillamp (E4) • Right taillamp and parking lamp (E4e2) Right side-marker lamp (E2e6)		7,5
25	R		1,0 mm ^{2} pink 0,5 mm ^{2} pink	Right front headlamp unit (E2) • Right turn signal lamp (E2e5) Right taillamp (E4) • Right turn signal lamp (E4e1) Right auxiliary turn signal lamp (E22/2) Traction system control unit (N47) Interior connector sleeve, circuit R (Z53/5): • Trailer hitch connector (X52) Instrument cluster (A1) • Right turn signal indicator lamp (A1e2)		7,5
26	15		4.0 mm ^{2} pink/red 2.5 mm ^{2} black/ yellow 4.0 mm ^{2} black/ yellow	Terminal 15 connector sleeve, fused (Z3/29) • Ignition coils M111 (T1) • Ignition coils M112 (T1) • Ignition coils M113 (T1)		15
27	30		1,0 mm ^{2} red	Traction systems control unit (N47)		40
28				NOT ASSIGNED		
29				Not assigned		
30				Not assigned		
31	30		0,5 mm ^{2} blue 0,8 mm ^{2} blue	Center console switch group (S21) Cockpit connector sleeve, vent window (Z50/ 13) • Left vent window switch (S21/13) • Right vent window switch (S21/14) Tilting/sliding roof switch (S13/2) Mirror lamps		15
32				Not assigned		
33				Not assigned		
34				Not assigned		
35				Not assigned		7
36	15			Mirror heater		10
37	30		1,0 mm ^{2} og	• Two-tone signaling system (H1)		20
38	30		1,0 mm ^{2} green	Fuel pump with fuel level sensor (M3/3) only on model 163.128		15
39				Not assigned		
40	30			Sound system		25
41				Not assigned		

G00315211

Fig. 13: Fuse Assignments Fuse & Relay Box F1 (4 Of 5)

Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Terminal	Color of unfused wire	Color of fused wire	Fused function	Bay	Rating in amperes (A)
42	30		0,8 mm ^{2} white 1,0 mm ^{2} white	Central locking: • Left front door central locking motor (M14/6) • Right front door central locking motor (M14/5) Interior central locking connector sleeve, motor 1 (Z53/1) • Rear-end door central locking motor (M14/7) • Left rear door CL [ZV] motor (M14/8) • Right rear door CL [ZV] motor (M14/9) • Fuel filler flap CL [ZV] motor (M14/10)		20
43	30		5,0 mm ^{2} white	Blower motor (M2), rear		20
44	30			Rear-end door washer fluid pump (M5/3)		15
44	30		2,0 mm ^{2} green	Type 163.154/157 Engine fan relay, stage 1 (F1k26) Engine fan relay, stage 1 (F1k26) Left engine compartment connector sleeve, fan (Z56/2) • Left additional fan (M4m1) • Right additional fan (M4m2)		40
45	30		2,5 mm ^{2} red / white	Electric air pump (M33)		40
46	58NS		0,8 mm ^{2} bg 1,0 mm ^{2} bg	Cockpit connector sleeve, rear fog lamp (Z50/10) • Left rear fog lamp (E3e5), right rear fog lamp (E4e5) Trailer hitch connector (X52)		7,5
47	58N		1,0 mm ^{2} grey 1,0 mm ^{2} grey	Additional headlamp connector sleeve, right of engine compartment (Z56/4) Left front headlamp unit (E1) • Left fog lamp (E1e4) • Left additional headlamp high beam (E1e7), right additional headlamp high beam (E2e7) Right front headlamp unit (E2) • Right fog lamp (E2e4)		15
48	30		1,0 mm ^{2} white	Alarm horn (H3)		20

G00315212

Fig. 14: Fuse Assignments Fuse & Relay Box F1 (5 Of 5)
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse & Relay Box F2 Fuse Assignments

For fuse locations, see **Fig. 15** . For fuse assignments, see **Fig. 16** .

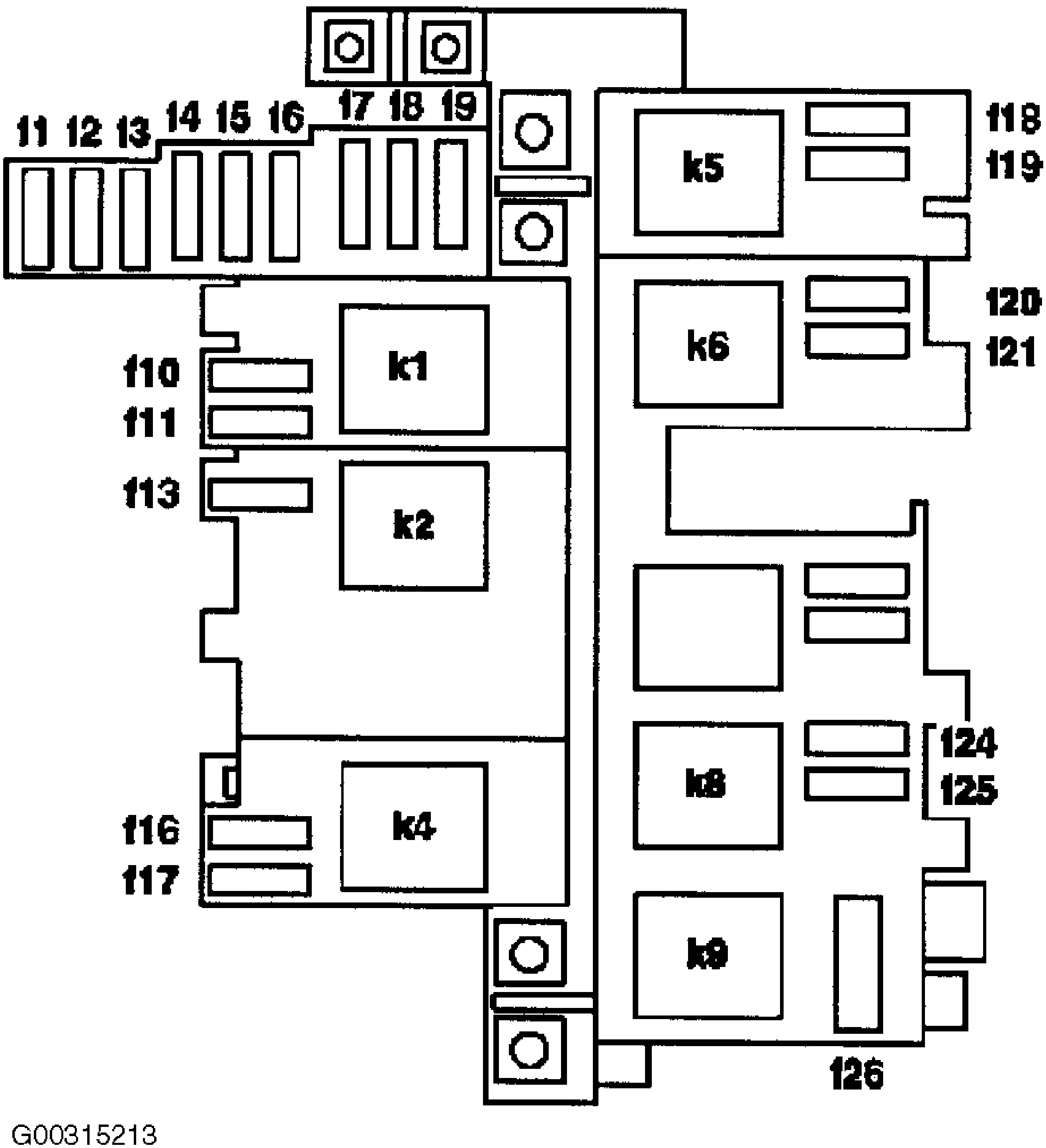


Fig. 15: Fuse Locations Fuse & Relay Box F2

Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse	Clamp	Wire Identification	Color of fused wire	Fused function	Rating in amperes (A)
1	15r	2154	0,5 mm2 bl	AIRBAG OFF indicator lamp	7.5
2	15r	2161	1,5 mm2 pk	Front cigar lighter (with ashtray illumination)	Up to VIN A289564, X754619: 20 As of VIN A289565, X754620: 15
3	15r	2162	0,75 mm2 gr	Tailgate wiper motor	15
4	30 30	2141 2167	3,0 mm2 rt 3,0 mm2 rt	Up to VIN A289564, X754619: E-Call control unit (USA only) As of VIN A289565, X754620: front blower motor	7.5 40
5	30	2155	1.5 mm2 red	Instrument cluster/air conditioning	Up to VIN A289564, X754619: 7.5
					As of VIN A289565, X754620: 15
6	30	2152	2.5 mm2 red	Interior socket	20
7				Not assigned	
8	15	2163	3.0 mm2 white	Left front seat heated cushion and right front seat heated cushion	Up to VIN A289564, X754619: 20
				Not assigned	As of VIN A289565, X754620
9				Not assigned	
10	30	2164	2.5 mm2 og	Left front seat adjustment switch	Up to VIN A289564, X754619: 30 As of VIN A289565, X754620: 35
11	30	2165	2.5 mm2 og	Right front seat adjustment switch	Up to VIN A289564, X754619: 30 As of VIN A289565, X754620: 35
13	30	2144	2,5 mm2 gn	Remove existing fuel pump with fuel level sensor (gasoline)	20
17	30	2166	2.5 mm2 pk	Heated rear window	25
19	30	2153	2,5 mm2 bl	HCS [SRA] pump	30
20	30	2169	1.0 mm2 white	Right high beam	As of VIN A289565, X754620: 7,5
21	30	2168	1.0 mm2 white	Left high beam/ high beam indicator	As of VIN A289565, X754620: 7,5
24	30	2170	2.5 mm2 red	Rear power window motors and voltage supply for lower control panel control unit	As of VIN A289565, X754620: 25
25	30	2171	2.5 mm2 red	Front power window motors and voltage supply for lower control panel control unit	As of VIN A289565,

Fig. 16: Fuse Assignments Fuse & Relay Box F2
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

RELAY ASSIGNMENTS

Fuse & Relay Box F1 Relay Assignments (Up-To-08/31/01)

For relay locations, see **Fig. 3** . For relay assignments, see **Fig. 17** .

Bay	Designation
k1	Heated rear window relay
k2	FAN relay module (K39)
k3	Electric fuel pump relay (except engine 612.963)
k4	Left turn signal relay
k5	Circuit 58 relay, license plate illumination/ instrument cluster
k6	Electronic Stability Program (ESP) / stop lamp suppression relay
k7	Right turn signal relay
k8	Starter relay (solenoid switch, terminal 50)
k9	Circuit 58R relay (right standing lamp)
k10	Spare
k11	Circuit 15 relay delayed (engine 612.963 only)
k12	Circuit 15 relay
k13	Circuit 58L relay (left standing lamp)
k14	Convenience relay
k15	Central locking relay, unlocking tailgate
k16	Right front power window relay
k17	Front wiper relay, intermittent
k18	Left front power window relay
k19	Heater circulation pump relay and box fan fuse and relay box
k20	Central locking relay: Locking all doors
k21	Heater blower relay
k22	Low beam and contact piece relay
k23	Central locking relay: Unlocking front passenger's door, rear doors and fuel tank flap
k24	Central locking relay: Unlocking driver's door
k25	ETS / ESP hydraulic unit relay
k26	Engine fan relay, stage 1, with air conditioning
k27	Spare
k28	Secondary air injection pump relay
k29	Rear fog lamp relay

Fig. 17: Relay Assignments Fuse & Relay Box F1
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse & Relay Box F1 Relay Assignments (As-Of-09/01/01)

For relay locations, see **Fig. 3** . For relay assignments, see **Fig. 18** .

Bay	Designation
k1	Relay for heated mirrors
k2	FAN relay module (K39)
k3	Electric fuel pump relay (engine 628.963 only)
k4	Left turn signal relay
k5	Circuit 58 relay, license plate illumination/ instrument cluster
k6	Stop lamp relay
k7	Right turn signal relay
k8	Starter relay (solenoid switch, terminal 50)
k9	Circuit 58R relay (right standing lamp)
k10	Spare
k11	Relay circuit 15 delayed (engines 612.963 and 628.963 only)
k12	Circuit 15 relay
k13	Circuit 58L relay (left standing lamp)
k14	Convenience relay (windows/roof/mirrors)
k15	Central locking relay, unlocking tailgate
k16	Spare
k17	Front wiper relay, intermittent
k18	Spare
k19	Spare
k20	Central locking relay: Locking all doors
k21	Spare
k22	Spare
k23	Central locking relay: unlock front passenger door, rear doors
k24	Central locking relay: Unlock driver door and fuel filler flap
k25	Spare
k26	Engine fan relay, stage 1, with air conditioning
k27	Rear-end door washer pump relay
k28	Secondary air injection pump relay
k29	Rear fog lamp relay

Fig. 18: Relay Assignments Fuse & Relay Box F1
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Fuse & Relay Box F2 Relay Assignments

For relay locations, see **Fig. 15** . For relay assignments, see **Fig. 19** .

Bay	Designation
k1	Seats convenience control relay
k2	Fuel pump relay (gasoline)
k4	Rear window defroster relay
k5	HCS [SRA] pump relay
k6	Auxiliary high beam relay (as of VIN A289565, X754620)
k8	Lower control panel/contact bridge switch (as of VIN A289565, X754620)
k9	Relay for voltage supply of term. 15

G00367755

Fig. 19: Relay Assignments Fuse & Relay Box F2
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.